





COVID-19 – Emergence & Update

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Sources: CDC, WHO, TDSHS



COVID-19 – Background

- ★ Large family of RNA viruses found in animals and humans (typically causing mild disease)
- ★ Novel (new) virus – not previously identified in humans, so no prior immunity
- ★ Uncommon for animal coronaviruses to infect people and then spread between people in a very severe form:
 - MERS-Middle East Respiratory Syndrome (2012)
 - SARS-Severe Acute Respiratory Syndrome (2002)
 - COVID-19 (previously 2019-nCoV)

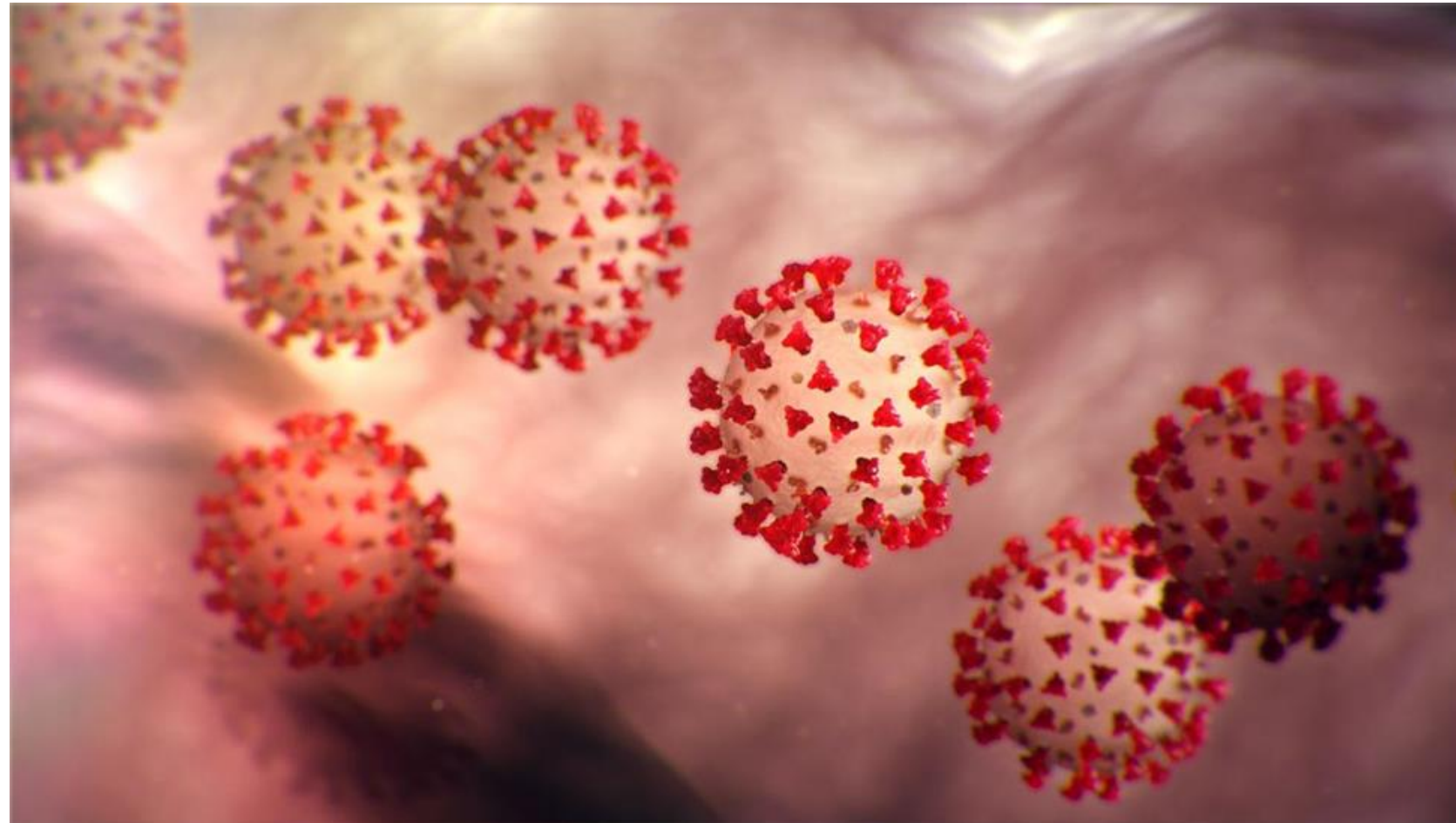


COVID-19 – Background

- ★ First cases reported in December 2019 in Wuhan (capital of Hubei province) with population of 11 million
- ★ First case in U.S. with COVID-19 reported 1/21/2020
- ★ First person-to-person spread confirmed in U.S. - 1/30/2020
- ★ Public Health Emergency declaration by WHO - 01/30/2020
- ★ Public Health Emergency declaration by U.S. government - 01/31/2020
- ★ **Immediate risk to U.S. public remains LOW**



COVID-19 – Background



CDC: Illustration of what the 2019 novel coronavirus looks like as it travels inside a body.
Contributed Photo: CDC



COVID-19 – Symptoms

Mild – most cases

- ★ Runny nose
- ★ Sore throat
- ★ Cough
- ★ Fever

Severe – uncommon

- ★ Above + shortness of breath
- ★ Above + pneumonia, ARDS, Sepsis/Septic shock
- ★ Death



COVID-19 – Clinical

- ★ Can be transmitted from person to person - usually involves close contact
- ★ Infected person can cough/sneeze and project mucous droplets or saliva that contain virus
- ★ Virus then transmitted to nose, mouth, lungs
- ★ Increased risk of transmission – elderly, people predisposed to pre-existing conditions that compromise immune system (i.e. diabetes, heart disease, dialysis, cancer patients on chemotherapy, chronic steroid use, etc.)



COVID-19 – Incubation Period

- ★ Symptoms may appear as early as 2 days but as long as 14 days after exposure
- ★ WHO recommends that follow-up of contacts with confirmed infection should be 14 days



COVID-19 – People at Risk

- ★ Those living/travelling in areas where COVID-19 virus is circulating (China)
- ★ Those living/working closely with those contacts even before they have symptoms
- ★ Family members
- ★ Co-workers
- ★ Healthcare professional caring for such patients
- ★ Current data suggests that symptomatic people are mostly spreading virus



COVID-19 – Treatment & Prevention

- ★ Currently no vaccine or anti-viral medication
- ★ Research ongoing with vaccine R&D being fast-tracked
- ★ Some treatments currently under investigation
- ★ Care mainly supportive
- ★ Antibiotics DO NOT work!
- ★ Avoid close contact with people who are sick.
- ★ Social distancing – maintain at least 3 feet distance from people, especially those with respiratory symptoms and fever



COVID-19 – Treatment & Prevention

- ★ Avoid touching your eyes, nose, and mouth with unwashed hands.
- ★ Stay home when you are sick.
- ★ Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- ★ Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.



COVID-19 – Treatment & Prevention

- ★ Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing.
 - ❖ If soap and water are not readily available, use an alcohol-based hand sanitizer.



COVID-19 – U.S. Travel Advisory

- ★ Foreign nationals who have been in China in the preceding 14 days are barred from entering U.S.
- ★ Travel Ban issued by the U.S. Department of State may not be foolproof



COVID-19 – U.S. Travel Restrictions

- ★ CDC recommends (and the U.S. Department of State has issued Travel Advisory) that travel to mainland China be avoided
- ★ Travel restriction does not apply to Hong Kong, Macau, or Taiwan
- ★ Travel restriction includes layovers in mainland China



COVID-19 – U.S. Travel Restrictions

- ★ U.S. citizens, lawful permanent residents and their family who have been in Wuhan will be allowed entry in the U.S., but will be undergo screening at 11 designated U.S. airports – DFW, not Houston
- ★ Travelers from China that are ill, will be taken to a medical facility for evaluation; further travel may be restricted
- ★ Travelers from China that are not ill will be allowed to reach their final destination but will have to monitor their health for 14 days from the time they departed from China



COVID-19 – Virulence & Vigilance

- ★ Immediate risk to the U.S. remains LOW
- ★ Case fatality rate remains LOW
- ★ But can prepare for seasonal flu with certainty
- ★ COVID-19 is a “wild card” – the course of epidemic remains uncertain
- ★ Novel RNA viruses can and do mutate



2019-nCoV – Reference & Guidance

Sources:

★ CDC, WHO, TDSHS

★ Note: Information limited and changing almost daily

★ Online Resources/Guidelines for General Public:

<https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

<https://www.cdc.gov/coronavirus/2019-ncov/about/index.html>

<https://dshs.texas.gov/coronavirus/>

Coronavirus 2019-nCoV Global Cases by Johns Hopkins CSSE:

<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>



Thank You!

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